

ABSTRACT

A network capable of providing rich media presentations includes a network server and a client station. The network implements HotMedia architecture to transmit the presentation including non-linkable media from the server to the client station. The server transmits the presentation as a streaming file in a framework of frames including a header frame, thumbnail frame, meta frame, media frame and end-of-stream frame. The client station includes an action enabling kernel and a client master module. The action enabling kernel contains a table lookup of action triggering inputs and consequent action commands for hotlinking. The master module controls a selection process of the various types of media involved in the presentation and provides a signal to the action enabling kernel to provide an appropriate action handler to the server. When a media frame is encountered the master module checks to determine that a media object has been created to handle the media frame. If not, the master fetches the media object from the server and creates an instance of the media object to render the media frame. The rich media file may also include meta frames with range and action subtypes for the media. The range and action frames are the meta data for hotlink compositions and actions. When the first meta frame is received, the master fetches the action enabling kernel and a hotlink canvas from the server. The master delivers the meta frames to the action enabling kernel. The hotlink canvas receives hot link composition from the action enabling kernel and displays hotlinks in the hotlink canvas by overlaying a transparent panel on top of the non-linkable media whereby the non-linkable media becomes interactive and hyperlinkable. The hotlink canvas provides the following functions: Query media current position and state; Forward media position and state to the action enabling kernel; Receive contending hotlink candidates from the action enabling kernel; Pick one hotlink among a set of hotlink candidates; Compose hotlinks by receiving hotlinks meta data from the action enabling kernel; Display range contours of hotlinks on the media object by overlaying a hotlink canvas; Perform an action specified; Request the action enabling kernel to handle an action; and decouple hotlinks in otherwise linkable media.